

Ryan Padraig Kelly

Reagan Theriault stepped back from her easel, paintbrush tucked between her lips, studying the swirl of blacks and greens on the canvas. To others, it was just another ode to mold—but to her, it was beauty. She leaned in, adding a hint of iridescence with a fine brush dipped in cobalt teal and titanium white. Her studio smelled of oil paint and damp earth, kept at 78% humidity for what she called “atmospheric authenticity”—awful for electronics, perfect for art.

Reagan had always gravitated toward the overlooked. As a child,

she collected dead insects while others picked flowers. In college, professors praised her technique but balked at her subjects. “Such talent wasted on such... unsettling imagery,” one had said, eyeing her painting of bread mold with both awe and unease.

At thirty-four, Reagan had carved a strange little space for herself in Boston’s art scene. Her last gallery show drew seven people—three of them family. The reviews were as expected:

"Theriault's technical prowess is undeniable, but her obsession with the decomposing and the

disgusting renders her work more suitable for a textbook than an art gallery."

She'd framed that review and hung it beside her workspace.

On this April Tuesday, Reagan was prepping for yet another exhibition—a modest showing at a fringe Cambridge gallery known for “biological art.” She disliked the label. Unlike artists who sculpted with blood or painted with bacteria, Reagan wasn’t *creating* mold. She was observing it, honouring it—revealing its quiet beauty through careful, detailed representation.

The piece she was finishing now was special. For three months, she'd tracked the growth of an unusual mold on her bathroom ceiling. Instead of scrubbing it away, she'd protected it—photographing it daily, capturing its evolution across a series of canvases. Its branching pattern had captivated her: delicate, lace-like tendrils unfolding in slow, silent bloom.

The phone rang, interrupting her concentration. It was Anna, the gallery owner.

"Reagan, darling, slight change of plans for Friday," Anna's voice was

tense with forced cheerfulness.

"We've had to shift your exhibition to the back room. The front space is going to Martin Clement—you know, the one who does those massive abstract explosions of color? His agent called and—"

"It's fine," Reagan replied, though it wasn't. The back room was half the size and received a fraction of the foot traffic. "I'm used to being hidden away."

"Don't be dramatic. It's just better business sense. Your work is... an acquired taste."

After hanging up, Reagan turned back to her canvas with renewed

determination. Let them hide her away. Let them dismiss her work as grotesque or bizarre. She knew there was truth in her paintings—a recognition of beauty in unexpected places.

Dr. Deirdre Lathurna hunched over her microscope, back stiff from hours in the same position. At forty-six, she was known as one of the most exacting minds in Massachusetts General's microbiology department, specializing in environmental mycology. For the past year, she'd chased a single question: could fungi break down microplastics in water systems? Some strains

showed potential, but the results were either too slow or produced toxic byproducts—promising, but never quite usable.

"Anything interesting?" asked Malik, her graduate assistant, as he entered the lab with two cups of coffee.

Deirdre straightened, accepting the cup gratefully. "Nothing revolutionary. Same issues we've been seeing—the *Aspergillus* strain is breaking down the polyethylene, but it's releasing compounds that would be problematic in natural water systems."

She took a sip of coffee and glanced at her watch. "I should head out. Anna's exhibition opens in an hour."

"Your sister the sculptor, right?"

"My cousin the gallery owner," Deirdre corrected. "I promised I'd make an appearance. Some avant-garde showcase or other."

Deirdre wasn't particularly interested in art, especially the experimental variety her cousin favoured for her gallery, but family obligations were family obligations.

The Cambridge Alternative Arts Space was already buzzing when Deirdre arrived. Her cousin spotted

her immediately and swooped in for air kisses.

"Dee, darling, so glad you could make it! Come, let me show you around. The main exhibition is Martin's work—those gorgeous explosions of colour—but we have several other artists featured tonight."

Deirdre nodded politely as Anna guided her through the gallery, the artwork did little for her; Deirdre had always been more moved by the elegant structures she observed under her microscope than anything humans created intentionally.

"And back here," Anna continued, leading her toward a smaller room, "we have Reagan Theriault's latest series. Bit of an odd duck, but technically brilliant."

As they entered the smaller gallery space, Deirdre froze. The walls were lined with large-scale paintings of various mold formations—each rendered with astonishing precision. Her trained eye immediately recognized several common species: *Penicillium*, *Cladosporium*, *Alternaria*. But it was the painting on the far wall that seized her attention.

"Excuse me," she murmured to Anna, moving closer to the canvas as if drawn by a magnetic force.

The painting depicted what appeared to be a complex mold formation with an unusual branching structure—fine tendrils extending outward in fractal patterns, with minute bulbous structures at various intersection points. The colouration was subtle: primarily a deep forest green, but with hints of teal iridescence along the hyphal extensions.

"Remarkable, isn't it?" said a voice beside her.

Deirdre turned to find a woman in her mid-thirties with paint-stained fingers and a tentative smile.

"Are you the artist?" Deirdre asked.

"Reagan Theriault," she confirmed.

"I rarely get such intense scrutiny of my work. Most people take one look and hurry to find something more pleasant to view."

"This particular formation," Deirdre said, gesturing to the canvas.

"Where did you observe it?"

Reagan looked surprised by the question. "My bathroom ceiling, actually. Old building with poor ventilation. Why do you ask?"

"I've been studying fungal structures for twenty years, and I've never seen this particular branching pattern. Yet something about it seems... I don't know, theoretically plausible in a way I can't quite articulate." Deirdre extended her hand. "I'm Dr. Deirdre Lathurna. I'm a microbiologist specializing in environmental mycology."

Reagan's eyes widened as she shook Deirdre's hand. "You study molds professionally? And you're actually interested in my work?"

"Very much so," Deirdre confirmed, turning back to the painting. "The

way you've captured the structural integrity of the mycelial network is extraordinary. These aren't just creative interpretations—these are scientifically accurate representations."

Reagan's face flushed with pleasure. "That's... that's exactly what I've been trying to explain to people. I'm not making this up or embellishing for dramatic effect. I'm documenting what I see, exactly as I see it."

"Do you have more work like this?"

"A whole studio full," Reagan admitted. "This is just a small selection."

"And this particular specimen," Deirdre tapped the frame of the painting that had caught her attention. "Do you still have access to it? The actual mold, I mean."

Reagan nodded slowly. "It's still growing on my ceiling. I've been documenting its development for nearly four months now."

Deirdre pulled out her business card and handed it to Reagan.

"Would you call me tomorrow? It may sound strange, but I'd like to see your studio—and your bathroom ceiling."

Reagan spent the night unable to sleep, alternating between excited

disbelief and certainty that Dr. Lathurna had been humouring her. By morning, she'd convinced herself the microbiologist wouldn't actually want to follow up. Still, at 8:30 AM, she took a breath and dialed the number on the card.

"Dr. Lathurna? This is Reagan Theriault. I hope I'm not catching you at a bad time—"

"Ms. Theriault, perfect timing. I've been thinking about your paintings all night. I've rearranged my schedule for today. Would it be possible for me to see your studio this morning?"

Three hours later, Deirdre stood in Reagan's apartment, gazing up at the bathroom ceiling with undisguised fascination. The mold formation was even more spectacular in person—a delicate network of filaments spreading across the corner where the ceiling met the wall, forming patterns that resembled intricate lacework.

"May I?" Deirdre asked, holding up a small collection kit.

Reagan nodded, and Deirdre carefully took several samples, placing them in sterile containers.

"How long have you been painting molds?" Deirdre asked as they moved to Reagan's studio space.

"Seriously? About eight years. But I've been fascinated by them since childhood." Reagan pulled out several portfolios and began laying paintings on every available surface. "These are chronological, from oldest to most recent."

Deirdre moved through the collection, occasionally stopping to photograph certain pieces with her phone. When she reached the most recent works—she spent nearly twenty minutes examining each canvas in silence.

"Reagan," she finally said, looking up with an intensity that made the artist nervous. "I believe you've been documenting a previously undescribed fungal species. One with a highly unusual growth pattern that might explain some anomalies we've been observing in our research."

"What kind of research?"

"We've been studying fungi that break down microplastics. A few strains show promise, but all have limits. That said, there's a theoretical model—one with a hyphal structure almost identical to what you've painted—that could

degrade polymers efficiently without toxic byproducts."

Reagan shook her head in disbelief. "You're saying my bathroom mold might help clean up pollution?"

"I'm saying it's possible. But I need to culture the samples and run some tests." Deirdre hesitated, then continued. "Would you be interested in collaborating? Your observational skills are extraordinary, and your documentation of the mold's development could be invaluable."

"Collaborating? With scientists?" Reagan laughed nervously. "Dr. Lathurna, I'm an artist who paints

mold because I'm obsessed with its beauty. I barely passed biology in high school."

"But you see things others don't," Deirdre insisted. "Including, apparently, trained mycologists. The level of detail in your work—the subtle colour variations, the precise structural elements—these aren't just artistic flourishes. They're data. Valuable scientific data that you've been collecting without even realizing it."

Reagan felt a fluttering in her chest that might have been hope or terror or both.

"What exactly would collaborating entail?" she asked cautiously.

"Initially? Access to your studio and permission to continue collecting samples. Beyond that? Maybe visits to my lab, discussions about what you've observed, possibly even joint publication if we confirm a new species." Deirdre smiled. "And who knows—maybe an exhibition that bridges science and art."

Reagan found herself nodding.

"Alright. Yes. I'd like that."

Three weeks later, Reagan sat in Deirdre's lab, watching through a microscope as the microbiologist adjusted the slide.

"There," Deirdre said, stepping back. "That's what you've been painting."

Reagan leaned in, peering through the eyepiece. The branching filaments matched what she'd been painting for months—seeing it under a microscope sent a quiet thrill through her.

"We've been testing it," Deirdre said, pulling up graphs. "Early results are promising. This undocumented strain produces an enzyme that breaks down PET—common microplastic—without the toxic byproducts we've seen in others."

"So it really could help with environmental cleanup?" Reagan asked.

"Potentially, yes. But there's a problem we're encountering. The mold is extremely difficult to culture in laboratory conditions. It seems to degrade rapidly under standard procedures." Deirdre tapped her pen against her notepad. "That's why your paintings are so valuable. You've documented stages we can't maintain long enough to study properly."

Reagan thought for a moment. "My studio conditions. Could that be

relevant? I keep it unusually humid and relatively dim—for the painting atmosphere."

Deirdre looked up sharply. "What's your exact humidity level?"

"Between 75-80%. And I keep the temperature around 68 degrees Fahrenheit."

"That might be it," Deirdre said, excitement rising in her voice.

"We've been using standard mycology protocols—brighter lighting, different humidity levels. Would you be willing to help us set up a cultivation environment that matches your studio?"

"Of course," Reagan nodded eagerly. "I can bring over my equipment tomorrow."

Months later, Reagan stood beside Deirdre in a conference room at Massachusetts General Hospital. The room was filled with microbiologists, environmental scientists, and representatives from several research foundations. On the walls hung enlarged photographs of microscope slides alongside Reagan's paintings—side by side comparisons that illustrated the extraordinary accuracy of her artistic observations.

"As you can see," Deirdre addressed the room, "the structural integrity of *Mycotheria verrucosa* is precisely as Ms. Theriault documented in her paintings—months before our laboratory confirmed its existence. The distinctive protrusions along the hyphal branches, which give the species its name, are particularly evident in this series from April."

"The polymer degradation capabilities of *Mycotheria verrucosa*—or 'Theria's Lace,' as we've taken to calling it—represent a significant breakthrough in bioremediation potential," Deirdre continued. "Initial field tests show a

73% reduction in PET microplastics in controlled water samples over a two-week period, with no detectable toxic byproducts."

A hand raised in the audience. "Dr. Lathurna, could you elaborate on the cultivation challenges you mentioned in your paper? How did you overcome the rapid degradation issues?"

Deirdre smiled and gestured to Reagan. "I'll let Ms. Theriault address that, as she was instrumental in solving that particular problem."

Reagan stepped forward, still uneasy in a lab coat but growing

more confident. “The key was recreating what we now call ‘studio conditions’ instead of standard lab protocols. *Mycotheria* thrives in environments like... well, the ceiling of my bathroom,” she said, earning a quiet laugh. “By keeping humidity between 75–80% and using low, targeted light, we’ve been able to grow stable, sustainable colonies.”

After the presentation concluded, Reagan found herself surrounded by scientists eager to discuss her observations—not just of *Mycotheria verrucosa* but of other mold species she'd documented over the years. One researcher

from MIT was particularly interested in her paintings of a *Stachybotrys* variant she'd found in her previous apartment.

"You know," he said, studying one of her portfolio images, "this structural anomaly you've captured here—we've been theorizing about this possibility, but we've never observed it directly. Would you consider letting us examine the original specimen?"

"Unfortunately, that apartment was renovated years ago," Reagan replied. "But I have more detailed studies in my studio. You're welcome to see them."

Later, as the room cleared, Deirdre approached with two glasses of champagne. "To successful collaboration," she said, handing one to Reagan.

"And to finding purpose in unexpected places," Reagan added, clinking her glass against Deirdre's.

"I have news," Deirdre said after taking a sip. "The Environmental Protection Foundation wants to fund a three-year research initiative focused on *Mycotheria* and its applications. They've specifically requested that you be included as a co-investigator, with

a focus on visual documentation and cultivation environment design."

Reagan nearly choked on her champagne. "Me? A co-investigator? Deirdre, I'm not a scientist."

"No, but you're something equally valuable—a trained observer with a unique perspective. And," Deirdre added with a smile, "they're also interested in funding a traveling exhibition. Science museums across the country, featuring your paintings alongside scientific displays about bioremediation and fungal ecology."

Reagan felt tears pricking at her eyes. For years, she'd endured dismissal and ridicule for her artistic choices. She'd been rejected from mainstream galleries, mocked in reviews, and questioned by fellow artists about her "disturbing fixation." Now, suddenly, that same fixation had revealed itself to be not just valid but valuable—worthy of scientific recognition and public exhibition.

"There's something else," Deirdre continued, reaching into her bag. She pulled out a scientific journal and handed it to Reagan. "This arrived today. The first published paper on *Mycotheria verrucosa*."

Reagan opened the journal with trembling hands. There, listed as co-authors: Dr. Deirdre Lathurna, Reagan Theriault, and the rest of the research team.

"I never imagined..." she began, unable to complete the thought.

"That your obsession with painting mold would lead to a scientific breakthrough?" Deirdre finished for her. "Sometimes the most important discoveries happen when different worlds collide. Your artwork revealed what our microscopes missed—not because our equipment was inadequate, but

because we weren't looking with the right eyes."

One year later, Reagan stood in the center of the Boston Museum of Science, surrounded by her artwork. The exhibition—titled "Theria's Lace: Where Art Meets Microbiology"—had opened to critical acclaim and unprecedented public interest. Her paintings, once relegated to back rooms of fringe galleries, now hung prominently alongside scientific displays explaining their significance.

The central installation featured a specially designed cultivation chamber where visitors could

observe live colonies of *Mycotheria verrucosa* breaking down plastic samples—the delicate lacework of its structure visible through magnifying panels.

Later that evening, at the formal reception, Reagan found herself standing beside Deirdre as reporters gathered for interviews. The story of their unlikely partnership had captured public imagination—the eccentric artist and the meticulous scientist, finding common ground in the delicate patterns of mold.

"Ms. Theriault," one reporter asked, "how does it feel to have your

artistic obsession validated by the scientific community?"

Reagan paused before speaking, "It's not about validation. It's about recognition—not just of my work, but of the idea that beauty and meaning can exist in overlooked places. I painted mold because I saw complexity and elegance in it. I never expected that vision to line up with science."

"And Dr. Lathurna," another reporter asked, "has this collaboration changed how you approach your research?"

Deirdre nodded. "Absolutely. We're trained to be objective—to follow

protocols, track markers, stick to the known. But Reagan showed me the power of seeing differently. The breakthrough didn't come from technique, but from viewing the environment as she did—as atmosphere, as mood, as something whole.”

After the interviews concluded, Reagan wandered through the exhibition alone, marveling at the journey that had brought her here. Near the exit, she paused before the final piece—a newly completed painting of *Mycotheria verrucosa* in its most mature state, its filaments extending outward like embroidered lace, its surface

glistening with the subtle iridescence she'd always tried to capture.

Beside the painting hung a magnified photograph of the actual mold structure taken through an electron microscope—nearly identical to her painted representation. And next to that, a simple plaque that read:

*Mycotheria verrucosa (Theria's
Lace)*

*Named for artist Reagan Theriault,
whose paintings revealed what
microscopes had missed.*

*A testament to the power of seeing
the extraordinary in the
overlooked.*